Abstract

A method of fingerprinting digital video by inserting a watermark into

5   individual color channels or the intensity channel of a streaming video. The watermark is a cryptographically encoded identifier for an authorized video delivery consisting of spectral lines inserted in the perceptually significant portions of the Fourier spectrum of the individual frames of the video. In-phase and quadrature components or sinusoids

10   may be encoded in two chroma channels to provide shift-invariant detection of the spectral lines. The pattern is repeated for a perceptually significant duration to defeat frame-swapping attacks. The watermark is extracted by comparing a suspected pirated video to the original video. The watermark data is interpreted to identify the source

15   of the pirated video to enable criminal prosecution.

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